

IN THE CLAIMS

Please amend the claims as follows:

1. (*currently amended*) A boot method for use in a mobile device having FLASH memory storing boot instructions and a key value stored in a security location, having an internal read-only memory storing boot program code and a predetermined security value, and having a serial port, the boot program code stored in the read-only memory performing comprising the steps of:

reading a key value from a security location in the FLASH memory;

comparing the key value to a predetermined security value stored in the internal read-only memory; and

depending on the result of the comparison of the key value to the predetermined security value, either selectively polling the serial port for activity or jumping to the FLASH memory for execution of boot instructions stored therein based on the result of the comparison.

2. (*original*) A boot method according to claim 1 wherein the polling is performed if the key value does not match the predetermined security value.

3. (*cancelled*)

4. (*original*) A boot method according to claim 2 further comprising the step of downloading code into internal SRAM located in the mobile device in response to a detection of serial port activity.

5. (*original*) A boot method according to claim 4 further comprising the step of executing an instruction in the downloaded code.

6. (*currently amended*) A boot method according to claim 1 further comprising the step of jumping to a boot location in FLASH memory to execute boot instructions stored therein wherein the predetermined security value is stored in a BootROM located in the mobile device.

7. (*currently amended*) A boot method according to claim 1 wherein the predetermined security value is stored in a BootROM located in the mobile device step of reading is performed in

response to a reset command.

8. (currently amended) A processor configured to communicate with internal read-only and FLASH memories of an apparatus for use in a mobile device having a serial port, the processor being configured to execute boot program code stored in a read-only memory for reading a key value from a security location in a FLASH memory, and for comparing said key value to a predetermined security value stored in the internal read-only memory, and, depending on the result of the comparison of the key value to the predetermined security value, either polling the serial port for activity or jumping to the FLASH memory for execution of boot instructions stored therein. A boot method according to claim 1 wherein the step of reading is performed in response to a reset command.

9. (currently amended) An apparatus for use in a mobile device having a serial port, comprising:
an first internal read-only memory means having storing boot program code and a predetermined security value stored therein;

a FLASH second memory means storing boot instructions and having a security location for storing a key value; and

thea processor of claim 8 in communication with the first and second memory means for comparing a key value stored in the security location to the predetermined security value, and for selectively polling the serial port for activity based on the result of the comparison.

10. (currently amended) An apparatus according to claim 9 wherein the first internal read-only memory means comprises a Boot Read Only Memory (BootROM).

11. (cancelled)

12. (original) An apparatus according to claim 9 further comprising a reset means in communication with the processor for initiating a reset process.

13. (original) An apparatus according to claim 9 wherein the processor compares the key value and said predetermined security value in response to initiation of a reset process.

14. (*currently amended*) An apparatus according to claim 9 wherein the ~~first internal read-only memory means~~ is located on an ASIC.

15. (*original*) An apparatus according to claim 9 wherein the processor is located on an ASIC.

16. (*original*) An apparatus according to claim 9 wherein the processor comprises a microcontrol unit connected to the serial port.

17. (*currently amended*) An apparatus according to claim 9 wherein the processor comprises a digital signal processor connected to the ~~secondFLASH~~ memory means.

18. (*previously presented*) A method for bootup of a computing device, the computing device comprising a serial port and internal memory comprising FLASH memory and a BootROM memory comprising BootROM code, the method comprising the steps of:

executing instructions stored in the BootROM code to read a key value from a security location in the FLASH memory, the key value being independent of the contents of FLASH memory;

executing instructions stored in the BootROM code to compare the key value to a predetermined security value stored in the BootROM memory;

on the condition that the comparison shows a match between the key value and the predetermined security value, executing instructions stored in the BootROM code to transfer execution to instructions stored in a boot location in the FLASH memory; and

on the condition that the comparison shows a mismatch between the key value and the predetermined security value,

polling the serial port for activity,

downloading new code into internal memory through the serial port in response to a detection of serial port activity, and

transferring execution to instructions in the new code.

19. (*previously presented*) A program product for a computing device, the program product comprising program code embodied in a program product media, the program product comprising program code operative to carry out the steps of Claim 18.

20. (*previously presented*) An apparatus for use in a mobile device having a serial port and an internal memory comprising FLASH memory and a BootROM memory comprising BootROM code, the apparatus further comprising a processor,

the BootROM code comprising instructions executable on the processor to read a key value from a security location in the FLASH memory, the key value being independent of the contents of FLASH memory;

the BootROM code further comprising instructions executable on the processor to compare the key value to a predetermined security value stored in the BootROM memory;

the BootROM code further comprising instructions executable on the processor, on the condition that the comparison shows a match between the key value and the predetermined security value, to transfer processor execution to instructions stored in a boot location in the FLASH memory; and

the BootROM code further comprising instructions executable on the processor, on the condition that the comparison shows a mismatch between the key value and the predetermined security value, to

poll the serial port for activity,

download new code into internal memory through the serial port in response to a detection of serial port activity, and

transfer processor execution to instructions in the new code.